

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
2101 NASA Road 1
Houston, Texas 77058-3696



February 27, 2003

Reply to Attn of : MA-03-011

TO: Distribution

FROM: MA/Manager, Space Shuttle Program

SUBJECT: Return to Flight Activities

Although there is still much work to be done in support of the Columbia Accident Investigation Board, there exists areas within the Space Shuttle Program (SSP) where design and/or operations improvement should be reviewed and assessed for near term implementation. The following represent specific areas of emphasis within the SSP where actions have been assigned.

1. External Tank (ET): Review the ET bipod area and recommend changes to the ET insulation design and implementation to preclude any loss of insulation. Return to flight constraint. Lead: Manager, External Tank Project (MSFC)
2. Onorbit inspection and repair: Identify wing leading edge and tile inspection techniques and repair options. The assessment should concentrate on utilizing the International Space Station assets and capabilities along with Department of Defense assets. Lead: Director, Mission Operations Directorate (JSC)
3. Ground based launch and ascent photographic and radar coverage: Review the existing launch viewing assets and capabilities (camera, film, radar, etc.) and recommend improvements, if required. Lead: Manager, Space Shuttle Systems Integration (JSC)
4. Flight based photographic coverage: Identify options to obtain flight coverage of critical launch and ascent activities and environments. Include ET and solid rocket booster platform locations. Lead: Manager, Space Shuttle Systems Integration (JSC)
5. Entry trajectory: Examine possibility of trajectory modifications to minimize entry heating. Document benefits to critical entry systems (i.e., wind leading edge, tile insulation, etc.). Lead: Director, Mission Operations Directorate (JSC)


Ronald D. Dittmore

cc:
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